



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/772,446	02/06/2004	Takahiro Komatsu	2004_0190A	5164
7055 7590 04/28/2010 GREENBLUM & BERNSTEIN, P.L.C. 1950 ROLAND CLARKE PLACE RESTON, VA 20191				
EXAMINER NGUYEN, DAO H				
ART UNIT 2818		PAPER NUMBER		
NOTIFICATION DATE 04/28/2010		DELIVERY MODE ELECTRONIC		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

gbpatent@gbpatent.com  
pto@gbpatent.com

# Office Action Summary

**Application No.**

10/772,446

**Applicant(s)**

KOMATSU ET AL.

**Examiner**

DAO H. NGUYEN

**Art Unit**

2818

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 11 January 2010.  
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-28 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1-28 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☒ The drawing(s) filed on 11 January 2010 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☐ Information Disclosure Statement(s) (PTO/GS/US)  
4) ☐ Interview Summary (PTO-413)  
5) ☐ Notice of Informal Patent Application  
6) ☐ Other: \_\_\_\_\_  
Paper No(s)/Mail Date \_\_\_\_\_

### DETAILED ACTION

1. This Office Action is in response to the communications dated 01/11/2010.  
Claims 1-28 are active in this application.

### Remarks

2. Applicant's arguments have been fully considered, but are moot in view of the new ground(s) of rejection(s). See details below.

### Claim Rejections - 35 U.S.C. § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. **Claim(s) 1-28 are rejected under 35 U.S.C. 103 (a) as being unpatentable over Yamazaki et al. (US 2004/0174324) in view of Wehrmann et al. (US 2002/0110701)**

Regarding claim 1, Yamazaki discloses an information reading unit, shown in figs. 2, 4-6, 14, 19-20, comprising on a substrate:

an anode 409 or 991 that supplies a hole (figs. 19, 20, for example);

a hole transporting layer laminated on the anode (in the Yamazaki invention, the EL layer is sandwiched between an anode and a cathode, wherein the EL layer can be a single layer or a laminating structure of a freely combination of multiple layers, including electric charge transporting layers (viz. hole transporting layer, electron transporting layer), charge generating layer, light emitting layer, etc.; see paras. [0036, 0037, 0039, 0338, 0352, 0366, 0379]) which transports a hole supplied from the anode,

a cathode 411 or 996 that supplies an electron;

an electron transporting layer 994 laminated on the cathode 994, which transports an electron supplied from the cathode 996;

a light emitting layer held and laminated between the hole transporting layer and the electron transporting layer, which emits light by an operation of a hole injected from the hole transporting layer and an electron injected from the electron transporting layer; and

a light receiving layer 421 which converts a reflected light in which the reflected light emitted from the light emitting layer is reflected by an object 425 into an electric signal;

wherein at least a part of the light receiving layer 421 has a light transmitting property, and the light receiving layer 421 and the light emitting layer 422 are laminated.

Yamazaki may not specifically discuss a hole transporting layer laminated on the anode by a configuration in which a low molecular organic material is dispersed in a

polymer. However, Yamzaki does state that low molecular weight materials can be utilized for the charge transporting layer (para. [0367]).

Wehrmann discloses a light emitting element comprising a charge transporting layer which may be a hole transporting layer laminated on the anode by a configuration in which a low molecular organic material is dispersed in a polymeric binder. See paras. [0008, 0020-0021, 0083-0084].

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the invention of Yamazaki so that the hole transporting layer being configured in which a low molecular organic material is dispersed in a polymeric binder, as that taught by Wehrmann, in order to provide electroluminescent assemblies having a high light flux. See para. [0012] of Wehrmann.

In addition, It would have been obvious that selecting a known material on the basis of its suitability for the intended use is just within the general skill of a worker in the art. Caterpillar Inc. v. Deere & Co., 224 F.3d 1374, 56USPQ2d 1305 (Fed. Cir. 2000); Al-Site Corp. v. VSI Int'l, Inc., 174 F.3d 1308, 1316, 50 USPQ2d 1161, 1165 (Fed. Cir. 1999); Chiuminatta Concrete Concepts, Inc. v. Cardinal Indus. Inc., 145 F.3d 1303, 1309, 46 USPQ2d 1752, 1757 (Fed. Cir. 1998); Lockheed Aircraft Corp. v. United States, 193 USPQ 449, 461 (Ct. Cl. 1977); Data Line Corp. v. Micro Technologies, Inc., 813 F.2d 1196, 1 USPQ2d 2052 (Fed. Cir. 1987). Furthermore,

MPEP § 2144.07 states that the selection of a known material based on its suitability for its intended use supported a prima facie obviousness determination in *Sinclair & Carroll Co. v. Interchemical Corp.*, 325 U.S. 327, 65 USPQ 297 (1945) (Claims to a printing ink comprising a solvent having the vapor pressure characteristics of butyl carbitol so that the ink would not dry at room temperature but would dry quickly upon heating were held invalid over a reference teaching a printing ink made with a different solvent that was nonvolatile at room temperature but highly volatile when heated in view of an article which taught the desired boiling point and vapor pressure characteristics of a solvent for printing inks and a catalog teaching the boiling point and vapor pressure characteristics of butyl carbitol; "Reading a list and selecting a known compound to meet known requirements is no more ingenious than selecting the last piece to put in the last opening in a jig-saw puzzle." 325 U.S. at 335, 65 USPQ at 301.). See also *In re Leshin*, 227 F.2d 197, 125 USPQ 416 (CCPA 1960) (selection of a known plastic to make a container of a type made of plastics prior to the invention was held to be obvious); *Ryco, Inc. v. Ag-Bag Corp.*, 857 F.2d 1418, 8 USPQ2d 1323 (Fed. Cir. 1988) (Claimed agricultural bagging machine, which differed from a prior art machine only in that the brake means were hydraulically operated rather than mechanically operated, was held to be obvious over the prior art machine in view of references which disclosed hydraulic brakes for performing the same function, albeit in a different environment.). See also MPEP § 2183.

Regarding claim 2, Yamazaki/Wehrmann discloses an information reading unit wherein the light receiving layer and the light emitting layer are provided on the same optical axis. See fig. 6 of Yamazaki.

Regarding claim 3, Yamazaki/Wehrmann discloses the information reading unit wherein the light receiving layer 421 comprises an organic photoelectric converting unit having a photoelectric charge generating region formed by at least one type of electron donating organic material and electron accepting material between electrodes. See embodiment 7, paras. [0363-0379] of Yamazaki.

Regarding claim 4, Yamazaki/Wehrmann discloses the information reading unit wherein the photoelectric charge generating region at where the electron donating organic material and the electron accepting material are mixed. See embodiment 7 of Yamazaki.

Regarding claim 5, Yamazaki/Wehrmann discloses the information reading unit wherein the electron accepting material contains at least one of fullerenes and carbon nano tubes. See embodiment 7 of Yamazaki.

Regarding claims 6-18, Yamazaki/Wehrmann discloses the information reading unit comprising all claimed limitations. See figs. 1-2, 4-6, 14, 19-20 of Yamazaki.

Regarding claim 19, Yamazaki discloses an information reading unit, shown in figs. 1-2, 4-6, 14, 19-20, comprising on a substrate:

an anode 409 or 991 that supplies a hole (figs. 19, 20, for example);

a hole transporting layer laminated on the anode (in the Yamazaki invention, the EL layer is sandwiched between an anode and a cathode, wherein the EL layer can be a single layer or a laminating structure of a freely combination of multiple layers, including electric charge transporting layers (viz. hole transporting layer, electron transporting layer), charge generating layer, light emitting layer, etc.; see paras. [0036, 0037, 0039, 0338, 0352, 0366, 0379]) which transports a hole supplied from the anode,

a cathode 411 or 996 that supplies an electron;

an electron transporting layer 994 laminated on the cathode 994, which transports an electron supplied from the cathode 996;

a light emitting layer held and laminated between the hole transporting layer and the electron transporting layer, which emits light by an operation of a hole injected from the hole transporting layer and an electron injected from the electron transporting layer; and

a light receiving layer 421 which converts a reflected light in which the reflected light emitted from the light emitting layer is reflected by an object 425 into an electric signal;

wherein at least a part of the light emitting layer and the light receiving layer 421 has a light transmitting property, and the light receiving layer 421 and the light emitting



layer 422 are laminated, and the light emitted from the light emitting layer is received by a plurality of light receiving layers.

Yamazaki may not specifically discuss a hole transporting layer laminated on the anode by a configuration in which a low molecular organic material is dispersed in a polymer. However, Yamazaki does state that low molecular weight materials can be utilized for the charge transporting layer (para. [0367]).

Wehrmann discloses a light emitting element comprising a charge transporting layer which may be a hole transporting layer laminated on the anode by a configuration in which a low molecular organic material is dispersed in a polymeric binder. See paras. [0008, 0020-0021, 0083-0084].

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the invention of Yamazaki so that the hole transporting layer being configured in which a low molecular organic material is dispersed in a polymeric binder, as that taught by Wehrmann, in order to provide electroluminescent assemblies having a high light flux. See para. [0012] of Wehrmann.

In addition, It would have been obvious that selecting a known material on the basis of its suitability for the intended use is just within the general skill of a worker in the art. *Caterpillar Inc. v. Deere & Co.*, 224 F.3d 1374, 56USPQ2d 1305 (Fed. Cir.

2000); *Al-Site Corp. v. VSI Int'l, Inc.*, 174 F.3d 1308, 1316, 50 USPQ2d 1161, 1165 (Fed. Cir. 1999); *Chiuminatta Concrete Concepts, Inc. v. Cardinal Indus. Inc.*, 145 F.3d 1303, 1309, 46 USPQ2d 1752, 1757 (Fed. Cir. 1998); *Lockheed Aircraft Corp. v. United States*, 193 USPQ 449, 461 (Ct. Cl. 1977); *Data Line Corp. v. Micro Technologies, Inc.*, 813 F.2d 1196, 1 USPQ2d 2052 (Fed. Cir. 1987). Furthermore, MPEP § 2144.07 states that the selection of a known material based on its suitability for its intended use supported a prima facie obviousness determination in *Sinclair & Carroll Co. v. Interchemical Corp.*, 325 U.S. 327, 65 USPQ 297 (1945) (Claims to a printing ink comprising a solvent having the vapor pressure characteristics of butyl carbitol so that the ink would not dry at room temperature but would dry quickly upon heating were held invalid over a reference teaching a printing ink made with a different solvent that was nonvolatile at room temperature but highly volatile when heated in view of an article which taught the desired boiling point and vapor pressure characteristics of a solvent for printing inks and a catalog teaching the boiling point and vapor pressure characteristics of butyl carbitol; "Reading a list and selecting a known compound to meet known requirements is no more ingenious than selecting the last piece to put in the last opening in a jig-saw puzzle." 325 U.S. at 335, 65 USPQ at 301.). See also *In re Leshin*, 227 F.2d 197, 125 USPQ 416 (CCPA 1960) (selection of a known plastic to make a container of a type made of plastics prior to the invention was held to be obvious); *Ryco, Inc. v. Ag-Bag Corp.*, 857 F.2d 1418, 8 USPQ2d 1323 (Fed. Cir. 1988) (Claimed agricultural bagging machine, which differed from a prior art machine only in that the brake means were hydraulically operated rather than mechanically operated, was held

to be obvious over the prior art machine in view of references which disclosed hydraulic brakes for performing the same function, albeit in a different environment.). See also MPEP § 2183.

Regarding claim 20, Yamazaki/Wehrmann discloses the information reading unit wherein at least one of the light receiving layers is shield by a light shielding layer thereby preventing irradiation of a reflected light. See para. [0335, 0353] of Yamazaki.

Regarding claims 21-25, Yamazaki/Wehrmann discloses the information reading unit comprising all claimed limitations. See figs. 1-2, 4-6, 14, 19-20 of Yamazaki.

Regarding claim 26, Yamazaki discloses an information reading unit, shown in figs. 1-2, 4-6, 14, 19-20, comprising on a substrate:

an anode 409 or 991 that supplies a hole (figs. 19, 20, for example);

a hole transporting layer laminated on the anode (in the Yamazaki invention, the EL layer is sandwiched between an anode and a cathode, wherein the EL layer can be a single layer or a laminating structure of a freely combination of multiple layers, including electric charge transporting layers (viz. hole transporting layer, electron transporting layer), charge generating layer, light emitting layer, etc.; see paras. [0036, 0037, 0039, 0338, 0352, 0366, 0379]) which transports a hole supplied from the anode, a cathode 411 or 996 that supplies an electron;

an electron transporting layer 994 laminated on the cathode 994, which transports an electron supplied from the cathode 996;

a light emitting layer held and laminated between the hole transporting layer and the electron transporting layer, which emits light by an operation of a hole injected from the hole transporting layer and an electron injected from the electron transporting layer; and

a light receiving layer 421 which converts a reflected light in which the reflected light emitted from the light emitting layer is reflected by an object 425 into an electric signal;

wherein at least a part of the light emitting layer has a light transmitting property, and the light receiving layer 421 and the light emitting layer 422 are laminated.

Yamazaki may not specifically discuss a hole transporting layer laminated on the anode by a configuration in which a low molecular organic material is dispersed in a polymer. However, Yamazaki does state that low molecular weight materials can be utilized for the charge transporting layer (para. [0367]).

Wehrmann discloses a light emitting element comprising a charge transporting layer which may be a hole transporting layer laminated on the anode by a configuration in which a low molecular organic material is dispersed in a polymeric binder. See paras. [0008, 0020-0021, 0083-0084].

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the invention of Yamazaki so that the hole transporting layer being configured in which a low molecular organic material is dispersed in a polymeric binder, as that taught by Wehrmann, in order to provide electroluminescent assemblies having a high light flux. See para. [0012] of Wehrmann.

In addition, It would have been obvious that selecting a known material on the basis of its suitability for the intended use is just within the general skill of a worker in the art. *Caterpillar Inc. v. Deere & Co.*, 224 F.3d 1374, 56USPQ2d 1305 (Fed. Cir. 2000); *Al-Site Corp. v. VSI Int'l, Inc.*, 174 F.3d 1308, 1316, 50 USPQ2d 1161, 1165 (Fed. Cir. 1999); *Chiuminatta Concrete Concepts, Inc. v. Cardinal Indus. Inc.*, 145 F.3d 1303, 1309, 46 USPQ2d 1752, 1757 (Fed. Cir. 1998); *Lockheed Aircraft Corp. v. United States*, 193 USPQ 449, 461 (Ct. Cl. 1977); *Data Line Corp. v. Micro Technologies, Inc.*, 813 F.2d 1196, 1 USPQ2d 2052 (Fed. Cir. 1987). Furthermore, MPEP § 2144.07 states that the selection of a known material based on its suitability for its intended use supported a prima facie obviousness determination in *Sinclair & Carroll Co. v. Interchemical Corp.*, 325 U.S. 327, 65 USPQ 297 (1945) (Claims to a printing ink comprising a solvent having the vapor pressure characteristics of butyl carbitol so that the ink would not dry at room temperature but would dry quickly upon heating were held invalid over a reference teaching a printing ink made with a different solvent that was nonvolatile at room temperature but highly volatile when heated in view of an article which taught the desired boiling point and vapor pressure characteristics of a solvent for

printing inks and a catalog teaching the boiling point and vapor pressure characteristics of butyl carbitol; "Reading a list and selecting a known compound to meet known requirements is no more ingenious than selecting the last piece to put in the last opening in a jig-saw puzzle." 325 U.S. at 335, 65 USPQ at 301.). See also *In re Leshin*, 227 F.2d 197, 125 USPQ 416 (CCPA 1960) (selection of known plastic to make a container of a type made of plastics prior to the invention was held to be obvious); *Ryco, Inc. v. Ag-Bag Corp.*, 857 F.2d 1418, 8 USPQ2d 1323 (Fed. Cir. 1988) (Claimed agricultural bagging machine, which differed from a prior art machine only in that the brake means were hydraulically operated rather than mechanically operated, was held to be obvious over the prior art machine in view of references which disclosed hydraulic brakes for performing the same function, albeit in a different environment.). See also MPEP § 2183.

Regarding claim 27, Yamazaki discloses an information reading unit, shown in figs. 1-2, 4-6, 14, 19-20, comprising on a substrate:

an anode 409 or 991 that supplies a hole (figs. 19, 20, for example);

a hole transporting layer laminated on the anode (in the Yamazaki invention, the EL layer is sandwiched between an anode and a cathode, wherein the EL layer can be a single layer or a laminating structure of a freely combination of multiple layers, including electric charge transporting layers (viz. hole transporting layer, electron transporting layer), charge generating layer, light emitting layer, etc.; see paras. [0036, 0037, 0039, 0338, 0352, 0366, 0379]) which transports a hole supplied from the anode,

a cathode 411 or 996 that supplies an electron;  
an electron transporting layer 994 laminated on the cathode 994, which transports an electron supplied from the cathode 996;

a light emitting layer held and laminated between the hole transporting layer and the electron transporting layer, which emits light by an operation of a hole injected from the hole transporting layer and an electron injected from the electron transporting layer; and

a light receiving layer 421 which converts a reflected light in which the reflected light emitted from the light emitting layer is reflected by an object 425 into an electric signal;

wherein at least one of the light receiving layer 421 and the light emitting layer has a light transmitting property, and the light receiving layer 421 and the light emitting layer 422 are laminated, and the light emitted from the light emitting layer is received by a plurality of light receiving layers.

Yamazaki may not specifically discuss a hole transporting layer laminated on the anode by a configuration in which a low molecular organic material is dispersed in a polymer. However, Yamazaki does state that low molecular weight materials can be utilized for the charge transporting layer (para. [0367]).

Wehrmann discloses a light emitting element comprising a charge transporting layer which may be a hole transporting layer laminated on the anode by a configuration

in which a low molecular organic material is dispersed in a polymeric binder. See paras. [0008, 0020-0021, 0083-0084].

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the invention of Yamazaki so that the hole transporting layer being configured in which a low molecular organic material is dispersed in a polymeric binder, as that taught by Wehrmann, in order to provide electroluminescent assemblies having a high light flux. See para. [0012] of Wehrmann.

In addition, It would have been obvious that selecting a known material on the basis of its suitability for the intended use is just within the general skill of a worker in the art. *Caterpillar Inc. v. Deere & Co.*, 224 F.3d 1374, 56USPQ2d 1305 (Fed. Cir. 2000); *Al-Site Corp. v. VSI Int'l, Inc.*, 174 F.3d 1308, 1316, 50 USPQ2d 1161, 1165 (Fed. Cir. 1999); *Chiuminatta Concrete Concepts, Inc. v. Cardinal Indus. Inc.*, 145 F.3d 1303, 1309, 46 USPQ2d 1752, 1757 (Fed. Cir. 1998); *Lockheed Aircraft Corp. v. United States*, 193 USPQ 449, 461 (Ct. Cl. 1977); *Data Line Corp. v. Micro Technologies, Inc.*, 813 F.2d 1196, 1 USPQ2d 2052 (Fed. Cir. 1987). Furthermore, MPEP § 2144.07 states that the selection of a known material based on its suitability for its intended use supported a prima facie obviousness determination in *Sinclair & Carroll Co. v. Interchemical Corp.*, 325 U.S. 327, 65 USPQ 297 (1945) (Claims to a printing ink comprising a solvent having the vapor pressure characteristics of butyl carbitol so that the ink would not dry at room temperature but would dry quickly upon heating were held



invalid over a reference teaching a printing ink made with a different solvent that was nonvolatile at room temperature but highly volatile when heated in view of an article which taught the desired boiling point and vapor pressure characteristics of a solvent for printing inks and a catalog teaching the boiling point and vapor pressure characteristics of butyl carbitol; "Reading a list and selecting a known compound to meet known requirements is no more ingenious than selecting the last piece to put in the last opening in a jig-saw puzzle." 325 U.S. at 335, 65 USPQ at 301.). See also *In re Leshin*, 227 F.2d 197, 125 USPQ 416 (CCPA 1960) (selection of known plastic to make a container of a type made of plastics prior to the invention was held to be obvious); *Ryco, Inc. v. Ag-Bag Corp.*, 857 F.2d 1418, 8 USPQ2d 1323 (Fed. Cir. 1988) (Claimed agricultural bagging machine, which differed from a prior art machine only in that the brake means were hydraulically operated rather than mechanically operated, was held to be obvious over the prior art machine in view of references which disclosed hydraulic brakes for performing the same function, albeit in a different environment.). See also MPEP § 2183.

Regarding claim 28, Yamazaki/Wehrmann discloses the information reading device wherein electric information obtained by the light receiving layer is converted into a digital signal by using the information reading unit. See figs. 1-2, 4-6, 14, 19-20 of Yamazaki.

### Conclusion

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dao H. Nguyen whose telephone number is (571)272-1791. The examiner can normally be reached on Monday-Friday, 9:00 AM – 6:00 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven Loke, can be reached on (571)272-1657. The fax numbers for all communication(s) is 571-273-8300.

Art Unit: 2818

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571)272-1633.

/Dao H Nguyen/  
Primary Examiner, Art Unit 2818  
April 24, 2010